



mipi[®]
DEVCON

Peter Lefkin
MIPI Alliance Managing Director

MIPI State of the Alliance

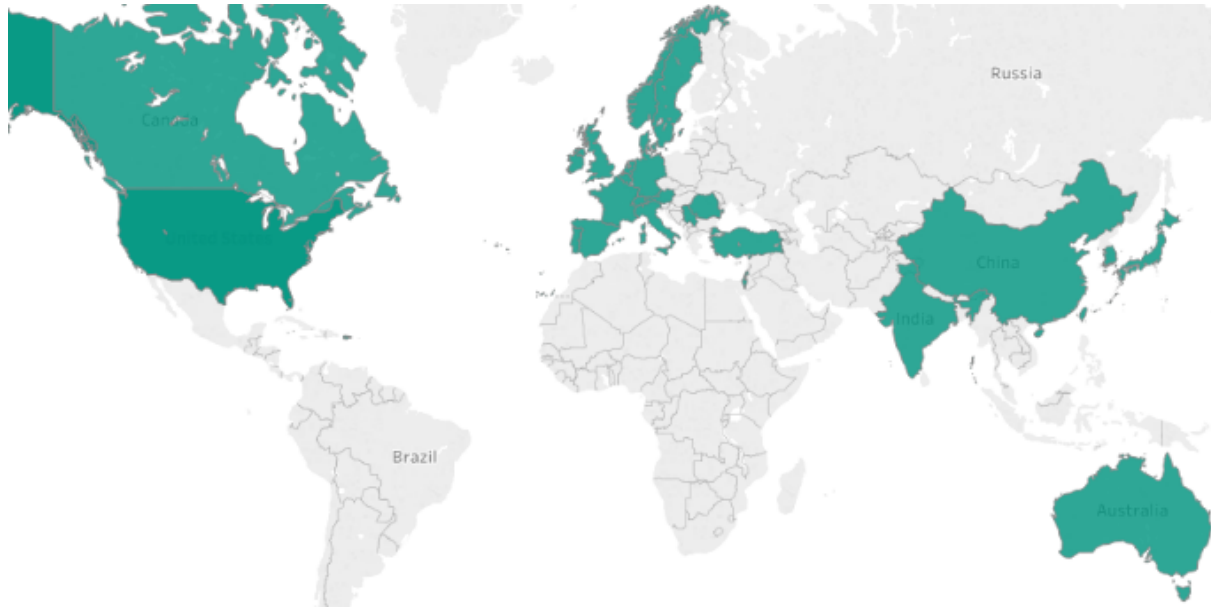
**MIPI ALLIANCE
DEVELOPERS
CONFERENCE**

**19 OCTOBER 2018
S E O U L**

[MIPI.ORG/DEVCON](https://mipi.org/devcon)

A Global Organization

Founded in 2003, MIPI Alliance is a global, collaborative organization of 300+ member companies spanning the mobile and mobile-influenced ecosystems.



MIPI member companies can be found in

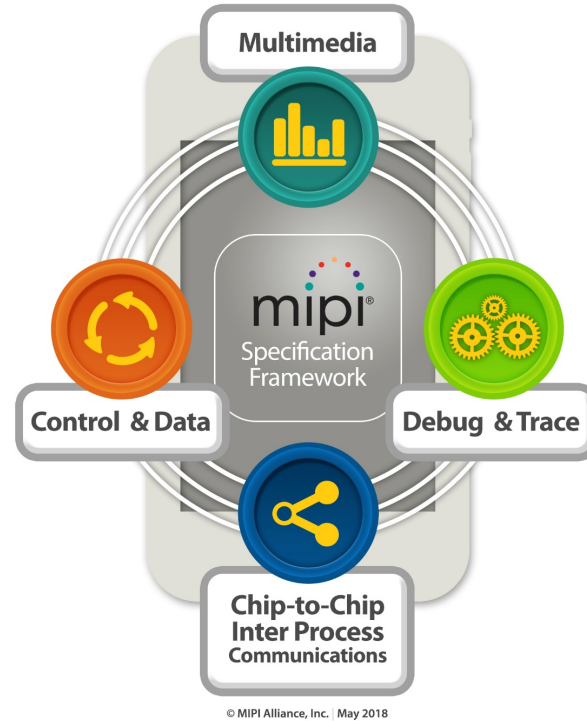
29

countries around the world



MIPI Alliance Mission

To provide the hardware and software interface specifications device vendors need to create state-of-the-art, innovative mobile-connected devices while accelerating time-to-market and reducing costs



15 Years of Moving Mobile Forward

FROM
2003

TO
2018

MORE THAN **50** SPECIFICATIONS DEVELOPED



From solving the challenges of interfacing displays and cameras in cellphones

To developing the world's most comprehensive set of interface specifications for mobile and mobile-influenced products

NOW MIPI SPECIFICATIONS ARE USED BEYOND MOBILE



PARTNERS JOIN WITH MIPI TO HELP SOLVE PROBLEMS



MIPI ALLIANCE
DEVELOPERS
CONFERENCE
19 OCTOBER 2018
SEOUL

Board and Contributor Members

Contributor Members



Board Members



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MIPI Groups

Board of Directors

Steering Groups

Technical Steering Group

Marketing Steering Group

Additional Groups:

Birds of a Feather: Security BoF

Investigation Groups (none currently)

Technical Groups

Audio

Automotive

Camera

Debug

Display

PHY

Reduced Input Output (RIO)

RF Front-End Control

Sensor

Software

Test

UniPro

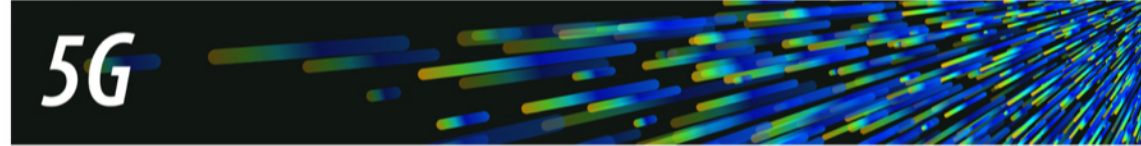
2018-19 MIPI Strategic Priorities



Areas of Focus

11
SPECIFICATIONS
WERE ADOPTED THIS YEAR

TIED FOR **2**^{ND HIGHEST NUMBER EVER}



5G



I3C Basic



Automotive & A-PHY



IoT/Wearables & AR/VR/XR

2018 MIPI Specifications



11
SPECIFICATIONS
WERE ADOPTED THIS YEAR

TIED FOR **2**ND HIGHEST
NUMBER
EVER

New Introductions

SyS-T v1.0	ALI3C v1.0
I3C HCI v1.0	TCS v1.0
I3C Basic v1.0	

Updates

Gigabit Debug for USB v1.1	DSI-2 v1.1
DCS v1.4	CSI-2 v2.1
UniPro v1.8	RFFE v2.1

Others Targeted for 2018 Completion

I3C HCI v1.1	CSI-2 v3.0	SoundWire v1.2	I3C v1.1
	CCS v1.1	VGI v1.0	Disco for I3C v1.0

5G



MIPI Mobile Interfaces:

**WIRING THE
FUTURE OF 5G**

Drive next generation of mobile devices

- Mobile evolving into 5G

Assess MIPI's 5G readiness

- MIPI has announced all of its specifications relevant for applications in mobile platforms are 5G ready.

Identify, position and align

- 5G requirements: current vs. future
- Updates/new MIPI specifications

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MIPI 5G White Paper Released Today



Making the 5G Vision a Reality: *A 5G Readiness Assessment of MIPI Specifications*

- Provides an overview and main use cases for 5G
- Details how each specification meets industry bandwidth, performance and feature requirements for a wide variety of 5G use cases

Available at www.mipi.org

I3C Basic

A feature-reduced, lower-complexity version of MIPI I3C



**NOW
ADOPTED!**

Developed to extend adoption of the MIPI I3C specification

- Does not require MIPI membership
- Facilitates a royalty-free licensing environment for all implementers

Currently available to members; non-member version available soon

- Watch for the announcement and visit www.mipi.org for updates

MIPI for Automotive

Infotainment

- Navigation
- Audio/video
- Entertainment

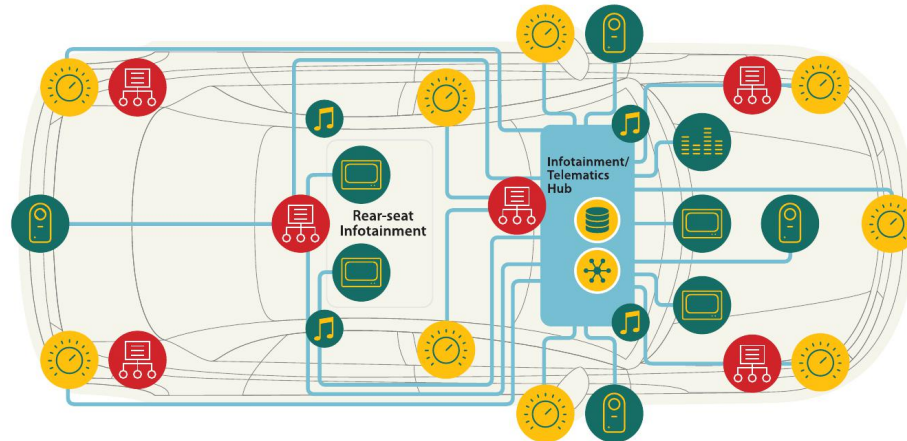
Driver Assistance

- Parking assist systems
- Lane departure warning
- Lane keeping assist systems
- Pedestrian detection
- Automatic emergency braking

Driver Information

- Instrument clusters
- Voice recognition
- High-definition displays
- Surround view

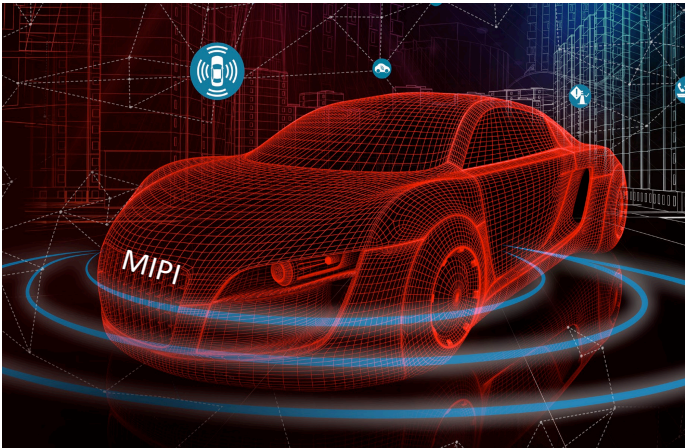
MIPI Alliance Auto System Diagram



- Different forms of SerDes for long length in-car connectivity.
- High speed cable assemblies and their topologies for audio, video, and control signals vary across automobile manufacturers and models.

- MIPI interfaces originally intended for small form-factor mobile terminals have been modestly increased to support longer transmission lengths.
- MIPI interfaces may be converted to/ from these high speed transports in bridge chips when lengths exceed MIPI specification lengths.

Automotive & A-PHY



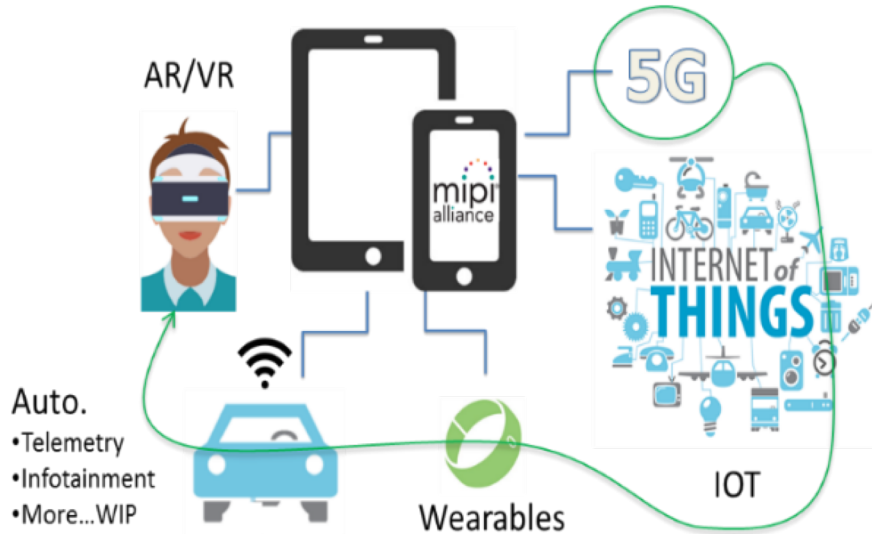
Develop/update MIPI specifications to ensure competitiveness and expand MIPI use in automotive

- CSI, DSI, I3C, etc.

Ensure alignment among MIPI working groups & address expanding automotive requirements

- Development is underway for MIPI A-PHY, a longer-reach physical layer (up to 15m) specification for ADS, ADAS and other surround sensor applications.
- Requirements gathering for higher-speed versions has begun for in-vehicle infotainment displays and other peripherals.

IoT/Wearables



Support Adoption of MIPI I3C and I3C Basic

- Drive awareness, access, and adoption for I3C

Define key IoT applications for I3C

- Use cases and model for use

Expand MIPI specifications in IoT

- CSI, DSI, VGI, RFFE, others

AR/VR/XR



Identify AR/VR/XR requirements relevant to MIPI

- Gaps, opportunities, needs

Assess current and/or new MIPI specifications

- Readiness for XR market

Explore leadership opportunities for MIPI in augmented & virtual reality

- Key specifications or solutions

Up Next ...

5G
White Paper
& Announcement

**FOCUS
ON IOT**

**13C
BASIC
v1.0
Publication**

**Automotive
White Paper**

explore **XR**

**WE HOPE
TO SEE YOU IN:**

MIPI ALLIANCE
DEVELOPERS
CONFERENCE **STUTTGART**
25 JUNE 2019

MIPI ALLIANCE
DEVELOPERS
CONFERENCE **TAIPEI**
18 OCTOBER 2019

MIPI ALLIANCE
DEVELOPERS
CONFERENCE **OSAKA**
23 OCTOBER 2020

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THANK
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